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FOOD AID IN HONDURAS Program Has Become a Model for Development

Over the past four decades, basic social indicators in this traditional rural society have improved dramatically. Child mortality has plummeted; food security has risen; and access to water and sanitation has progressed dramatically. Although much food aid during the 1980s was dissipated to maintain the status quo, PL 480 assistance has generally supported economic development. It can take part of the credit for Honduran progress.

SUMMARY

Since 1954 the United States has provided food aid to Honduras totaling \$325 million. Until recently, food aid has been a relatively small part of U.S. economic aid to this Central American nation, amounting to only 16 percent of total assistance. Forty percent of the food aid has been under Title I (government-to-government concessional aid), 42 percent in Title II (project-specific aid), and 18 percent in Title III (food for development). With the decline in other forms of aid, food aid has loomed larger since 1994, representing more than half of all U.S. economic aid to Honduras.

Most of the Title I aid was provided during the 1980s, when the United States sought to promote economic and political

Team leader: James W. Fox

Team members: Thoric N. Cederstrom, Frederick L. Mann, Edgar G. Nesman

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stability in Honduras through massive amounts of aid. During this period the food aid, mainly wheat, helped ensure adequate supplies for the largely urban consumers, providing a modest stabilizing effect on food prices. Along with the much larger amount of economic aid, the food aid did help achieve the overriding U.S. foreign policy goal of promoting stability in Honduras and isolating Nicaragua, its southern neighbor. This assistance contributed little, though, to Honduras's long-term development. Successive Honduran governments chose to use the aid to postpone economic reform during the 1980s, notably putting off currency devaluation. This raised the ultimate cost of the economic adjustment taken after 1990.

The Title II programs, including school feeding, maternal and child health, and food for work, were probably more effective. There is, however, little documentation on which to base this judgment, as evaluations during the 1970s and 1980s lacked the basic data or research design to draw useful conclusions about program results. The effects of school feeding programs in particular have been questioned. The maternal and child health and food-for-work programs have probably contributed modestly to the substantial improvement in basic social indicators in Honduras over the past 40 years. Infant mortality has fallen dramatically, from 157 per thousand in 1950 to 42 in 1993. This improvement has been associated with improved access to health services, increased availability of water and sewerage in rural areas, and modest economic growth.

Although the development contribution of food aid before 1990 is decidedly mixed, its value since then has been substantial. This increased effectiveness is due to several factors. First, the shift from Title I to Title III has increased the ability of USAID/Honduras to program local currency resources more effectively. The Mission has used it in those areas and for those purposes for which food aid is an effective instrument. Second, food aid has been closely in-

tegrated with the rest of the assistance portfolio and not treated as simply a spigot for transferring additional resources to the country. Third, the major provider of Title II food aid, CARE, has shown adaptability, great concern for effectiveness, and willingness to experiment to increase the development impact of food aid. Finally, the Mission has done careful and serious research into the effectiveness of alternative food aid approaches. In addition, the research has sensitized the Honduran government to such approaches and has created a positive climate for better utilization of food aid.

In sum, the USAID/Honduras program is a model for the effective use of food aid and its integration with other development tools.

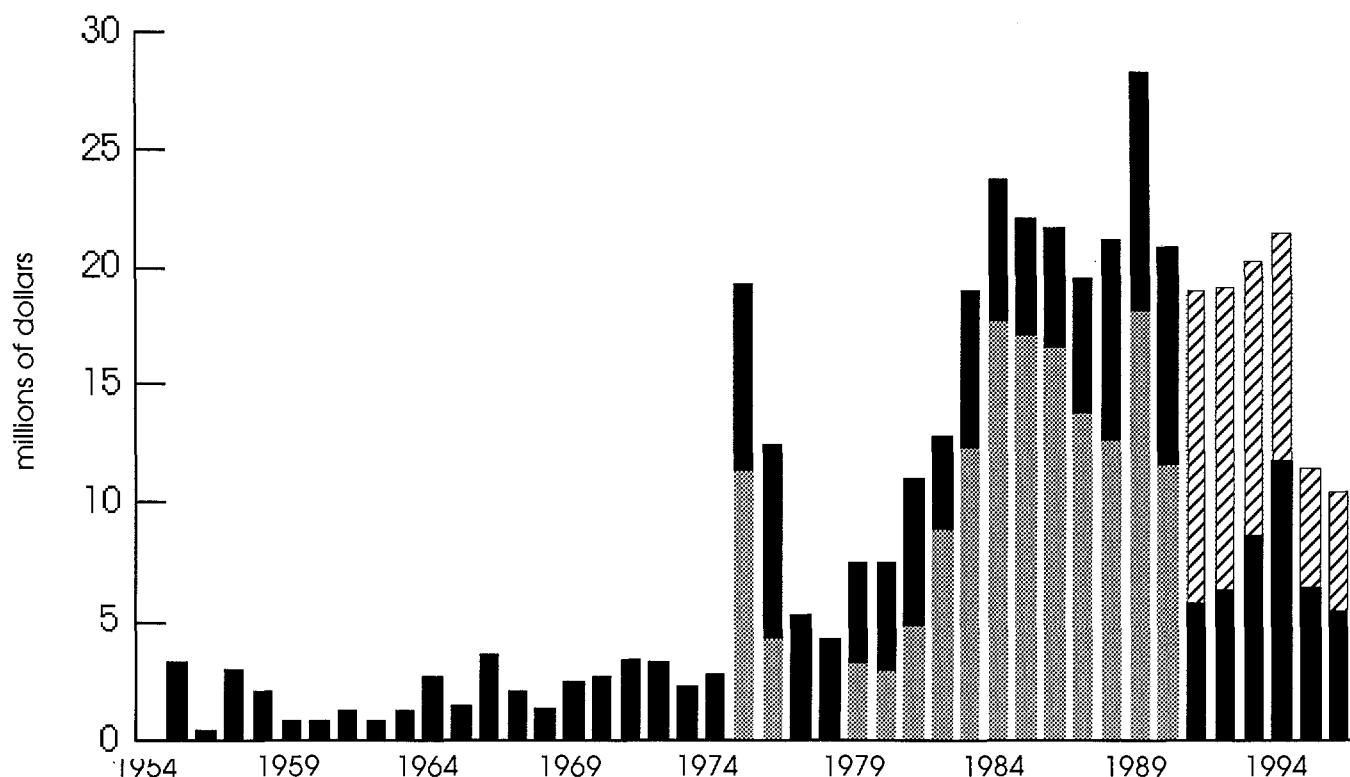
BACKGROUND

Honduras received more than \$325 million in food aid from the United States from 1954 through 1994 (see figure 1). Food aid accounted for 9 percent of all nonmilitary assistance given from 1954 through 1975 but increased to about 20 percent thereafter. Title I programs, funded in 1975–76 and 1979–90, accounted for 42 percent of PL 480 commitments. Title II programs, active every year since 1955, constituted 41 percent. Title III programs, funded from 1979 through 1983 and since 1991, made up the remaining 18 percent.

Food aid to Honduras was largest during 1982–91, the same years other economic and military aid peaked.* This dramatic increase had more to do with the country's strategic importance to the United States in its political struggle with Nicaragua than with an increase in the country's need for food aid.

*The United States provided Honduras with large amounts of military aid (averaging nearly \$50 million a year) from 1982 through 1991.

Figure 1. Honduras PL 480 Food Aid in Constant 1989 Dollars, 1954–96



The United States has been the largest single source of food aid to Honduras, contributing nearly 85 percent of the total during the past 25 years. Likewise, food aid became an increasing and significant source of total cereal consumed in Honduras (see figure 2). From 1971 through 1981, food aid contributed slightly more than 3 percent of total domestic grain consumption. From 1982 through 1992, this figure swelled to nearly 16 percent.

Wheat (including wheat flour, bulgur wheat, and wheat-soy flour) has been the main commodity delivered as food aid. It has accounted for more than 80 percent of all U.S. concessional exports to Honduras and nearly all Title I and Title III commodities since 1975. PL 480 wheat is milled locally and sold to bread, pasta, and pastry industries. Neither wheat nor close substitutes are produced in Honduras. Maize and rice constituted 7 percent and 3 percent, respectively, of PL

480 imports. Other Title II program commodities, such as soybean oil, dried beans, and powdered milk account for the remaining 10 percent.

Food aid has been provided to Honduras under all three titles, or programs.

Title I

Title I food aid was provided during 1975–76 and 1981–90. The initial Title I imports, during 1975 and 1976, were a humanitarian response to the fall in domestic cereal production from Hurricane Fifi. In 1981 the main Title I objective became support of political stability in Honduras, as a means for achieving U.S. foreign policy goals in Central America. Title I imports were intended to enhance food security and relieve balance-of-payments pressures to support political stability.

Title II

Title II food has been provided for all three traditional areas for this type of assistance:

Maternal and child health. The goals of the maternal and child health program were to improve the health conditions for children under 5 and for pregnant and lactating women in selected rural communities. Maternal and child health programs have operated since 1959, both through Honduran government health posts and through programs operated by private voluntary organizations.

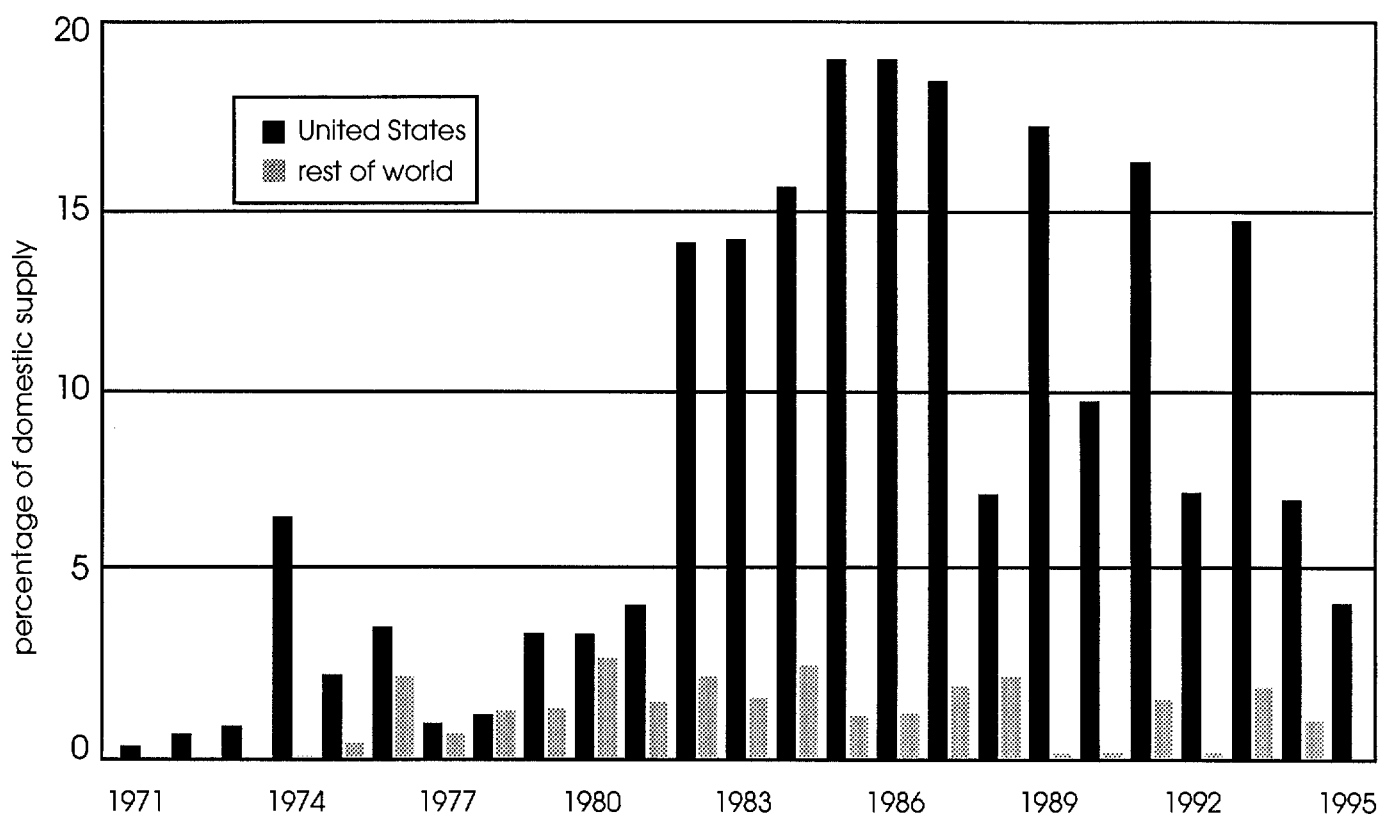
School feeding. For 35 years, CARE provided food for school snacks in rural primary schools

throughout Honduras. The program was terminated in 1995, though a smaller school breakfast program (funded by the Honduran government and other donors) continues in several departments.

Food for work. The food-for-work program has sought to alleviate poverty. It uses two mechanisms: 1) providing food to seasonally unemployed members of poor communities and 2) creating community assets such as roads, bridges, and irrigation systems that facilitate longer-run development.

Title II programs were implemented by CARE, Catholic Relief Services, and the Cooperative Housing Foundation, as well as by the Hondu-

Figure 2. U.S. Versus Rest-of-World Food Aid, and Food Aid As a Percent of Domestic Cereal Supply, Honduras, 1971–95



Source: OECD, DAC public database, 1996 data tape, and FAO PC database.

ran government. Following a period of difficulties, Catholic Relief Services phased out its Title II program in 1987. The group operated both maternal and child health and food-for-work programs. CARE has operated those as well as school feeding programs. In 1990, CARE began to monetize Title II wheat (that is, sell it, rather than give it directly to beneficiaries) to fund municipal infrastructure and urban food-for-work projects.

Title III

Since 1991 USAID/Honduras has had an annual Title III program.* The Title III programs were intended to improve food security of the Honduran population including all aspects of availability, access, and utilization. Title III in effect replaced Title I, with commodities sold to commercial buyers. It differs in that with Title III USAID has greater control over the resulting local currency. The Title III program was closely integrated with the rest of the USAID program, which laid great emphasis on improving both macroeconomic and agricultural sector policies.

The purposes are

- To increase overall food *availability*. This is accomplished directly by providing imported wheat and environmentally sustainable increases in food production. It is done indirectly through increases in foreign exchange from greater agricultural exports.
- To improve *access* by the rural poor to food and better diets by increasing household agri-

cultural production and small-farm and off-farm incomes.

- To contribute to improved food *utilization* by improving the coverage of potable water and sanitation services and by improving household health and dietary practices.

The Title III resources leveraged and supported needed monetary and fiscal policy changes and cushioned the ensuing structural adjustment. In addition, USAID used these resources to fund studies of agricultural policy issues, to establish the legal framework authorizing the reforms, and to initiate reform implementation. When some policy backsliding occurred during 1994–96, the Agency used PL 480 local currency generation to prevent further deterioration and to set in place reforms in both public and private sectors. The funds helped finance technical assistance to farmers, build rural infrastructure (notably water and sewerage), encourage agricultural research, support land titling, and develop regional agricultural cooperatives.

ECONOMIC IMPACT

In economic and social development, Honduras has historically been the poorest and most backward country in Central America. Historian Hubert Herring describes the country on the eve of the Alliance for Progress:

Honduras in 1960 was still the most retarded of the Central American states. Illiteracy stood at almost 70 percent; schools were meager and inadequate. Nagging poverty was the lot of most of the people, with the per capita income about \$160 in 1958.

Honduras had achieved this position the honest way—by persistent economic stagnation. Economist Victor Bulmer-Thomas estimates that per capita income rose by an average of a minuscule 0.2 percent a year between 1920 and

*There were Title III programs for several years during the 1970s, but these differed in important respects from those of the 1990s. Whereas the earlier programs converted Title I loan obligations to grants, the later programs were negotiated as grants from the outset. This provided the Mission with a much more valuable negotiating tool.

1960. Performance was by far the worst of the Central American countries. In 1960 Honduras was a traditional rural society, with very poor social indicators—infant mortality, for example, exceeded 100 per thousand live births. The country lacked basic economic infrastructure such as roads, electricity and water grids, and basic institutional infrastructure such as a transparent and consistently applied legal structure.

Honduran governments actively sought to modernize during the 1960s. Honduras joined the Central American Common Market, which encouraged domestic industrialization through import substitution. It expanded government investment and social programs in line with recommendations of the Alliance for Progress. Much of this new spending was funded by foreign aid, which grew to nearly 5 percent of gross domestic product. The aid came largely through newly created donor agencies: USAID, the Inter-American Development Bank, and the Central American Bank for Economic Integration. Later, in the 1970s, borrowing from commercial banks compensated for a slowdown in the growth of foreign aid flows. Economic growth during 1960–80 accelerated to about 1.2 percent per year per capita. That was far higher than previously but still slower than any of the country's Central American neighbors. (Civil wars in the late 1970s did, however, lead to declines in El Salvador and Nicaragua.)

By 1980 the existing Honduran growth strategy had reached the end of the line. Foreign debt could not be serviced, so borrowing from abroad was cut off. This forced retrenchment in government spending. Institutional factors (increasing inefficiency in the large public sector, uncertainties due to political conflict elsewhere in the region, stagnation in industrial production as import substitution opportunities were exhausted) reinforced this. A sharp economic decline began.

Large-scale U.S. economic assistance beginning in 1982 brought some breathing space for the Honduran government. From 1982 through 1992 the United States provided \$1.4 billion in economic assistance (including \$175 million under PL 480) and \$450 million more in military aid. The Honduran government was reluctant to undertake the kinds of economic reforms necessary to restore sustainable growth to the country (such as eliminating the budget deficit and devaluing the currency to end the foreign exchange imbalance). It used U.S. assistance to postpone adjustment. By 1990 a new Honduran government began making the policy changes necessary to restore sustainability, as U.S. government assistance began to taper off. By 1996, as U.S. aid had fallen to low levels, the government had sharply reduced economic imbalances.

Evolution of Honduran Government Policies

During the 1960s and 1970s, the government intervened heavily in price regulation, provision of inputs and credit, and marketing of output. Rural economic conditions improved during most of the period, as agricultural prices increased somewhat more rapidly than other prices. Government investment in rural infrastructure and public institutions supported growth, and price regulations were broadly consistent with market signals. The improvement in the rural sector's terms of trade were reflected in increasing per capita food output; it rose 21 percent from 1975 through 1981.

By the early 1980s the government was intervening more heavily in the agricultural marketplace. Price controls were applied to more than 60 food products. As this happened, agricultural terms of trade deteriorated steadily. One study estimated that from 1978 to 1986, agricultural prices increased by 31 percent,

whereas nonagricultural prices increased by 78 percent. A major share of this deterioration occurred after 1981. Likewise, overvaluation of the lempira, the Honduran currency, increased as prices began rising faster.

The government carried out monetary and fiscal policy reforms after 1990. An agricultural modernization law in 1992 dismantled most elements of the now-discredited state intervention policies that had been distorting the production, processing, marketing, and consumption of foodstuffs for more than a decade. This included institutional restructuring and decentralization. By the end of 1995, important privatizations of storage facilities and processing enterprises had been completed. A private agricultural research institution continued to grow stronger and more effective. Local initiatives and active participation were stimulating rapid decentralization of a number of agricultural and rural development programs to the municipal and community levels.

Agricultural Development Programs

During the 1970s, USAID agricultural programs concentrated on two main activities: infrastructure investment, including rural access roads, irrigation, electricity, and rural public facilities, and broad sector support intended to build capacity in public agricultural support institutions. These programs carried over into the early 1980s, but at declining levels. More than \$262 million was spent on these activities. Of this amount, 40 percent was provided in local currency, primarily from Title I.

The sector support programs may have been too broad and unfocused. Large numbers of public sector professional and technical personnel were trained, and the infrastructure programs (particularly irrigation projects) did benefit some farmers and remove some constraints to future development. Nevertheless, the adverse policy framework limited the programs' contribution

to agricultural growth. The sector approach of USAID assistance implicitly supported the Honduran government's interventionist policies related to agricultural and consumer food prices, markets, land redistribution, and credit.

Beginning in the early 1980s, USAID shifted its emphasis from public institutions to private ones. These included agricultural cooperatives, credit and savings institutions, small farmer organizations, and private research institutions. The Honduran government continued to favor a pervasive role for the state in regulating prices, markets, credit, and other services to producers, but it tolerated the Agency's efforts to strengthen private-sector institutions. The government even allocated some PL 480 local currency for programs that USAID sought in this area.

Economic Effects

Food aid can have an economic impact at the aggregate level through four main channels: 1) by providing additional real resources, 2) by providing additional government budgetary resources for development purposes, 3) by providing leverage for USAID to induce policy changes, and 4) by helping develop more effective development activities. Food aid's role in each area is discussed below.

Resource Transfers

PL 480 increases a country's capacity to import, allowing commodities to be acquired from abroad without current payments. Thus, more goods become available to the economy than the country would otherwise be able to purchase. In Honduras, this effect was relatively small. Overall, PL 480 added an average of less than 1 percent to Honduran imports. The highest relative importance was in 1989, when PL 480 constituted 2.8 percent of imports. This means that Honduran dependence on PL 480 was never particularly large. The country could have ac-

quired all of the PL 480 commodities by reallocating less than 3 percent of its imports. A devaluation of the lempira of less than 5 percent would surely have permitted this reallocation. Consequently, the level of PL 480 never created a threat of permanent dependence on food aid.

The very modest significance of PL 480 resource transfers contrasts with the major importance of *overall* U.S. assistance during some periods. From 1982 through 1991, U.S. economic and military aid averaged 21 percent of Honduran imports and reached a peak of 36 percent in 1987. This was a state of heavy dependence.

Budgetary Effects

During the 1980s, local currencies generated by PL 480 imports generally were programmed to support the Honduran government's agricultural policies and programs. Large amounts of local currency were programmed into the price control, public storage, and marketing programs.

Beginning about 1987, most PL 480-generated local currency went to activities designed to accelerate long-term sustainable agricultural development while raising incomes of rural families in the short run. The activities sought to 1) continue and reinforce sector policy reforms, 2) promote nontraditional agricultural export production and marketing, 3) stimulate microenterprise development (especially through access to credit) and strengthen sustainable private sector credit institutions, 4) mobilize local government participation and capacity-building for implementing local economic and social development programs, and 5) stimulate local initiatives to incorporate sustainable and profitable technologies and improved living conditions into hillside small-farm agricultural families.

The change from Title I to Title III in 1991 gave USAID more direct and effective control over programming of local currency. This, combined

with a simultaneous improvement in Honduran government policies, increased effectiveness. Better integration of PL 480 and Development Assistance resources added further to effectiveness. Programs currently under way appear on the whole to be quite successful, and several are unusually so. These include the Land Use and Productivity Enhancement and Small Farmer Export Development projects. Both appear to help small farmers substantially increase their production and incomes. Some programs were originally designed and implemented during the poor policy era of the 1980s. However, until macroeconomic and sectoral policy reforms were in place, the efforts of production development and local initiatives programs were largely neutralized by countervailing forces in the economy.

Policy Leverage

For the most part, PL 480 was only an add-on to a large economic assistance program. Consequently, it did not provide any independent policy leverage. Therefore, the issue is the extent to which the overall U.S. assistance package provided policy leverage, and the extent to which such leverage was used. During the 1980s, USAID sought major stabilization actions and structural reforms, notably including devaluation and cuts in government spending. The government and most elements of Honduran society, however, opposed these actions. Several times the Agency temporarily suspended economic aid disbursements because of noncompliance with conditions related to policy reform. The disbursements were ultimately made even in the absence of significant policy actions, because other parts of the U.S. government decided that U.S. political and security considerations in Honduras were overriding.

USAID did achieve some success during this period by building up a local constituency for future significant reforms. This was done through studies, policy dialog, institution-

building, and modest actions across a wide range of policy areas. Of special importance were two policy-analysis units established by the government with Agency encouragement—one for economic issues and another for the agricultural sector—to collect, analyze, and promote debate on policy issues. The units permitted Honduran and foreign economists to dispassionately analyze policy issues that had previously been debated with much more heat than light. By raising these issues for both internal and public debate, USAID's efforts eased the eventual adoption of economic reforms in 1990 and contributed to far-reaching reforms in agriculture in 1992.

More Effective Development Activities

A fourth possible economic effect of PL 480 is to increase the effectiveness of development programs carried out by the Honduran government with its own resources. This might result

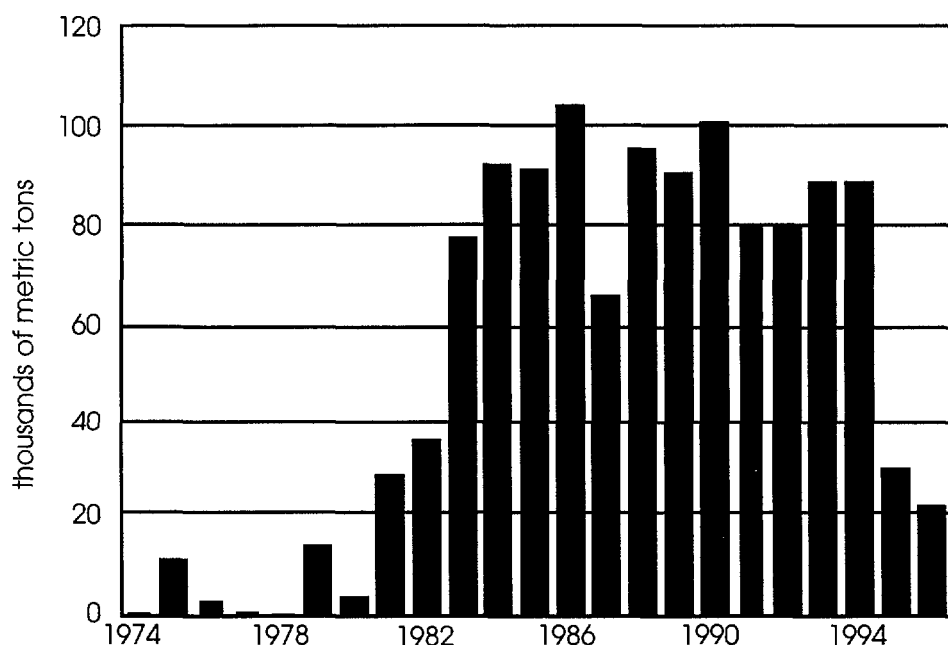
in particular from "demonstration effects" of PL 480-financed activities, where the success of these activities leads the government to adopt the same approach for the programs it funds with its own resources. The evaluation team did not specifically seek such cases, and none was identified by people interviewed. Still, such cases may exist.

Food Production Impact

PL 480 food aid had some impact on food production and on the well-being of farm families dependent on production of cereal grains for a significant share of their subsistence and incomes. The main vehicle for this impact was imports of wheat under the program.

Wheat was a small part of the Title II food aid program that commenced in 1955. As shown by figure 3, wheat imports under Title I (and its effective replacement, Title III) did become im-

Figure 3. Total PL 480 Wheat and Flour Imports, Honduras, 1974–96



portant in the 1980s. They averaged around 90,000 metric tons a year from 1983 through 1994, before declining sharply in 1995 and 1996. During 1983–89, virtually all wheat imported into Honduras arrived under PL 480. Under pressure to provide more balance-of-payments resources, the government set the “usual marketing requirements” (a baseline import level) at zero. That allowed PL 480 to replace sales that had previously been commercial.

In 1990, commercial sales resumed. Consumption of wheat was dynamic, and total wheat imports—commercial and food aid combined—rose sharply. They reached 110,000 metric tons in 1990, 189,000 tons in 1991, and more than 200,000 tons in subsequent years. Thus, while absolute levels of PL 480 imports fell only marginally from 1989 through 1994, their share of total wheat imports dropped sharply, from 100 percent in 1989 to less than half. There was another sharp decline in 1995.

Wheat rose steadily from 8 percent of total domestic cereal consumption in 1989 to 15 percent by 1995. Wheat consumption in Honduras is primarily urban. Most rural dwellers eat corn. As wheat became an increasingly important part of the diet, people ate less of the primary domestically produced cereal grain—corn. Overall, from 1975 through 1995, per capita wheat consumption doubled, to 32 kilograms. Per capita consumption of corn dropped nearly a quarter, from 81 kilograms to 63 kilograms for the same period.

Title I imports were sold to millers at the official exchange rate throughout the 1980s even though parallel exchange rates were much higher. (The official exchange rate had been held at 2 lempira per dollar since 1919. The parallel exchange rate gradually rose to more than 4 lempiras per dollar before the rates were unified in 1990.) The government also subsidized Title I in-country transportation costs and sold

the wheat to millers on credit, further lowering the cost of wheat relative to domestically produced cereals. These subsidies allowed the regulated price for flour to remain relatively stable. Thus, subsidized Title I wheat flour was competing directly with domestically produced cereal grains such as corn, rice, and sorghum that did not enjoy equivalent subsidies. Decision-making for Title I concessional wheat sales to Honduras during 1981–86 was driven by U.S. foreign policy. Because of this, concerns about negative effects of Title I imports on grain producer prices were essentially ignored or overruled.

A 1987 evaluation conducted for USAID concluded that Title I imports added only slightly to what otherwise would have been imported commercially and thus did not exert undue downward pressure on farm grain prices. Nevertheless, it seems obvious that sale at subsidized prices made possible by the highly overvalued exchange rate and other government subsidies to millers permitted a regulated flour price considerably below the equilibrium price, thereby exerting downward pressure on domestic grain prices.

Integration With Rest Of USAID Portfolio

The USAID/Honduras strategy of integrating Title III local currency with Development Assistance resources in policy analysis and reform activities has achieved far-reaching changes in agricultural sector policies in pricing, credit, marketing, and natural resource management. A three-step process of policy analysis, results dissemination, and adoption of a legal framework has been effective. Fortunately, in Honduras, combined Development Assistance and Title III resources were committed for sufficient time to achieve all three steps. Nevertheless, the level of Title III funding for Honduras has been uncertain until late in each of the last two fiscal

years. This has hampered the ability of USAID/Honduras to plan its programs.

SOCIAL IMPACT

Honduras has made great strides in health conditions over the last several decades. Infant mortality fell from 157 per thousand in 1950 to 74 in 1982, and then to 42 in 1993. Mortality for children under 5 followed a similar path. Increases in vaccination coverage for various childhood diseases have also been impressive. Coverage is now 95 percent. Expansion of access to water and sanitation systems has also been rapid. According to the National Epidemiology and Family Health Survey, the rural population with access to water rose from 48 percent in 1984 to 57 percent in 1996. Access to sanitation rose to 57 percent from 44 percent over the same period.

Total food availability has improved steadily since 1988 and has never been higher than in 1994. That has spelled an attendant improvement in food security at the national level. Availability of both domestic and imported food increased markedly. Total availability of food within the country, as measured by per capita caloric availability, is estimated at slightly below the Food and Agriculture Organization minimum of 2,500 calories per day. This is a national average, so it ignores variation in access to food by region, ethnicity, and socioeconomic status.

Data on chronic undernutrition show modest improvement. Some improvement occurred during the 1960s through the 1980s, though consistent survey data exist only since 1987. A paper by Laurence M. Gummer-Strawn of the Centers for Disease Control and Prevention*

analyzes the data in four surveys on nutrition in Honduras. As in the rest of Central America, the data show little acute malnutrition (low weight for height), with less than 2 percent of children more than two standard deviations below the norm. Chronic malnutrition (low weight for age and low height for age) occurs at high levels, though, with 24 percent of children two standard deviations below the norm in weight for age, and 38 percent in height for age. Severe malnutrition was stagnant during 1987–96 when measured by weight for age, but it shows a decline (from 44 percent in 1987) using height for age.

Gummer-Strawn sees economic status as the prime determinant of malnutrition. He states:

Virtually all of the trend in chronic malnutrition is explained by shifting the population toward the better-off socioeconomic groups. Long-term changes in nutritional status will best be achieved through general economic development and income generation programs.

Honduras's Western region stands out as the worst-off area nutritionally, with 38 percent more than two standard deviations below the norm in weight, and 63 percent in height. In general, rural areas lag markedly behind urban areas.

PL 480 Feeding Programs

This review looks at four activities: the school snack, the maternal and child health program, and two types of food coupons. Food for work and cash for work were not considered because of a lack of information on nutritional impact and the inconsistent nature of food provisioning. The school breakfast program was also not considered, since it has just started and is slated to end soon.

* "The Nutritional Status of Children in Honduras, 1987–1996." February 12, 1997. Manuscript.

The School Snack Program

Begun in 1959, the school snack program aimed to increase learning through increased attention and reduced absenteeism and desertion. Improved nutritional status was a secondary goal. Improving retention of rural students was seen as critical: although 89 percent of Honduras's primary school children had access to school, only 20 percent of those entering rural primary schools completed the sixth grade.

School feeding has been a major component of U.S. food aid to Honduras during the last 30 years. In 1987 some 330,000 of the nation's 750,000 school children in grades 1 through 6 were receiving snacks or beverages prepared from donated foods. That increased to 484,000 in 1991. Other programs were operating at the same time to give coverage to almost all of this age group. The U.S.-financed program gradually narrowed over time, from national coverage to targeting a narrower and poorer subgroup of the school population. By the program's termination, it operated only in the rural schools in nine departments in the poorer west.

Food per child per month was allocated to the schools at a rate of a quarter pound of a blended cereal, four ounces of oil, and one pound of soy-fortified bulgur wheat. CARE and the Ministry of Education stored the food and delivered it to the local communities. Once in the community, teachers supervised food preparation and distribution, and community volunteers provided fuel and labor for cooking.

The prepared snack had an estimated food value of 200 calories and 8 grams of protein. That represents 20 percent of daily caloric and 50 percent of daily protein requirements. The snack was given free 160 days a year to all students, although parents were asked to help pay for transportation and storage and contribute fuel for cooking and labor for loading and un-

loading the commodities. The estimated cost of the donated food in 1992 was 4 cents per feeding day per student. The total cost was on the order of \$1.5 million a year and typically involved 2,800 metric tons of food.

Maternal and Child Health

The MCH supplementary feeding program for women began during the 1960s. It strove to encourage use of services offered by the Ministry of Health, to strengthen health and nutrition activities of ministry, and to improve household and mother and child nutrition. All pregnant or lactating women or malnourished children under 6 were eligible. Two delivery systems provided participants with rations. The Programa de Alimentación Materno-Infantil distributed take-home dry rations through centers run by the Ministry of Health. The Junta Nacional de Bienestar Social (JNBS) program served prepared, or "wet," rations on-site to participants through various local entities. Monthly rations averaged 500 calories a day and 19 grams of protein a day per beneficiary, or approximately 25 percent of daily minimum requirements.

Bonos Mujer Jefe de Familia

The BMJF was designed to target poor female-headed households. When such households were found to be few in number, the program was broadened though the title remained. Currently the program includes all low-income children in primary schools in areas with the most severe malnutrition and poverty. Local teachers determine eligibility of participants.

Once determined as eligible, children continue to receive *bonos*, or coupons, through third grade, with no further consideration of nutritional status or income. The value in 1994 was 20 lempiras (about \$5) per month per child, recently raised to 40 lempiras. The bonos are dis-

tributed three or four times a year, making the total value per participating child the equivalent of \$37 a year. In 1994 some 190,000 children participated. The main objective is to increase school attendance and retention. Essentially, this is an income transfer that can be used to buy food and other goods, or be converted to cash. The PL 480 Title III monetization program has been an important source of funds, though no further allocations are planned.

Bonos Materno/Infantil

This program targets poor households with children under 5 or with pregnant and lactating women. Selection of participants is based on prevalence of malnutrition and extreme poverty. The bono has the same value as the BMJF and is distributed monthly at health centers. Up to three children per household, plus the mother, can participate. Its principal objective is to increase attendance at health centers.

Impacts

The programs supported by food aid seek a variety of goals: improved nutrition, better school attendance, more frequent visits to health

centers, more income to poor people. USAID performed or sponsored evaluations of food aid in 1977, 1987, and 1994.

The 1977 evaluation examined mainly management issues. These included distribution problems and long delays in getting the food from the central school delivery point to the surrounding schools. The evaluation also attempted to gauge impact, but it found that lack of baseline data or control groups made this impossible. A survey was done, and most of the teachers interviewed believed that school feeding improved attendance, but no statistical data were available to confirm these impressions.

The 1987 evaluation included interviews with 201 children as well as with mothers or primary caretakers. This study suffered from the same problems encountered in 1977, including lack of a baseline, lack of a control group, and inconsistent school data.

In contrast to this earlier work, two studies undertaken in 1994 did provide excellent sources of data for conclusions about program effectiveness. The first, the Consumption, Income, Expenditure, and Nutritional Status Survey, sampled 2,700 households nationwide. It provided information on program participation in the bonos and school feeding programs and on schooling indicators.

The second, the Cost Effectiveness Study, surveyed 132 randomly selected rural primary schools and 2,112 randomly selected students in high-poverty municipalities of the 9 poorest departments in western Honduras. This study also included 1,500 households drawn from a sample of

Table 1. Costs and Benefits of Food Aid Programs

Program	Cost/ Recipient	Benefit/ Recipient	Benefit/ Cost	Share to Bottom 25%
	<i>lempiras</i>	<i>lempiras</i>	<i>percent</i>	<i>percent</i>
MCH Bono	205	198	97	52
MCH Dry Ration	432	280	65	22
MCH Wet Ration	390	53	14	29
School Bono	231	183	79	52
School Snack	127	40	31	40

health centers in poor rural municipalities in western Honduras and provided information on the dietary intake of preschool children. The sample contained a sufficient number of school-age children to let the evaluators further analyze the effects of school program participation on nutrition.

The 1994 studies provided insights on the effects of food aid on nutrition, school attendance, health, and income distribution. These are discussed below. The studies also identified the costs—both monetary and nonmonetary (mostly in time required to receive the assistance)—associated with each of the programs and related these costs to the value received by beneficiaries. The studies identified the extent to which the poorest people benefited from each program. This cost-effectiveness analysis helped reshape the entire food aid approach of USAID and the Honduran government. Table 1 summarizes the findings of the study in this area.

Administrative and overhead costs varied by program. At one extreme, the maternal and child health bono program delivered 97 percent of the total cost of the program in value to the beneficiary. At the other extreme, the MCH direct-feeding program through the JNBS delivered to the beneficiaries a value equal to only 14 percent of program cost. The programs also differed markedly in the share of the benefits to the poorest people. The bonos programs were most effective in this regard. They provided more than half of all the benefits to people whose spending was in the bottom quartile. The MCH direct-feeding programs were the least targeted.

USAID and relevant Honduran organizations carried out these studies jointly. Joint ownership contributed to broad acceptance of the results. The identification of wide differences in value to poor people of different programs led to major changes in Honduran programs. USAID ended its support to the JNBS and to

the school snack programs, and the Honduran government placed greater emphasis on the bonos programs.

Nutrition

Assessing the nutritional impact of feeding programs calls for careful monitoring of specific anthropometric measures that reflect nutritional status. It also requires controlling for a host of confounding variables. None of the pre-1994 studies could hope to address these issues seriously, so the effort to measure nutritional impact was wasted. The 1994 study did use a rigorous approach, employing scientifically based sampling and comparing outcomes for schools with different programs.

The studies found significant improvements in nutrition from the MCH programs. School snacks did not have an identifiable effect on caloric intake, though they did increase the adequacy of vitamin-A consumption by 25 percent. Neither bonos program had an identifiable nutrition effect. The authors conclude that the school snack does not displace meals served at home. It is not common for children to bring food from home to eat at school.

Although the MCH programs did measurably improve caloric intake of participants, the studies did not link this result to the incidence of malnutrition. Moreover, the affected population was too small for the effect to be significant nationally. A number of factors other than food aid have contributed to the modest improvements in health and nutrition in Honduras over the last several decades. Thus the overall nutritional impact of the PL 480 program during most of its history, especially on chronic malnutrition, was probably minimal.

School Attendance and Learning

The Cost-Effectiveness Study investigated the impact of the distribution of food and coupons through primary schools on enrollment, repeti-

tion, attendance, academic achievement scores, and a composite indicator based on these criteria. In addition, the study compared schools, households, and children who participated in the school feeding program only, the bonos program only, the programs combined, and schools where neither program exists.

The study concluded that both programs had a significant effect on the number of years of schooling, though that of the bonos program was three times as large as school feeding. Nevertheless, the effect of both programs in a school was slightly smaller than that of school feeding alone, and far smaller than bonos alone. This result may have come about because both programs were provided only in very poor areas, but it raises questions about the reliability of the rest of the findings. The bonos program also led to more regular attendance during the school year. Neither program had an identifiable effect on academic performance as measured by standardized test scores.

These studies led to the elimination, on cost-effectiveness grounds, of the school snack program in favor of bonos. Such a shift could only have come from a carefully documented study supported by local government authorities. That's because the school snack program, operating for more than 30 years, is taken almost for granted as something that should be part of school life, particularly for children in areas of extreme poverty. Teachers, local government officials, and health service personnel all supported the snack program, and all previous evaluations mention its high level of acceptance. The bonos program is generally approved but lacks the visibility of the school snack program. It also achieves the intended purpose of encouraging poor children to stay in school. In effect, parents are given a financial incentive to keep their children in school longer.

Health Effects

The maternal/child feeding programs were intended to encourage greater preventive health activity through regular visits to health posts. According to the 1994 studies, participants in the MCH feeding program made an additional 4.9 visits per year per household (1.5 visits per person) to a health post, compared with those receiving bonos. Those receiving bonos did not differ from nonparticipants in this regard. Complicating factors, including a temporary suspension of the bonos program for several months during 1994 and differences among sample groups, may make the reliability of this result questionable. The study did not evaluate the effects of the additional visits to health centers.

Income Transfers And Distributional Effects

Because of the magnitude of poverty in Honduras relative to the amount of PL 480 resources, the direct effect of PL 480 on poor Hondurans is necessarily small. The Title II program has averaged about \$5 million a year, or perhaps \$2 a year for each poor person in the country. Obviously, the food or income transferred could not have a significant effect on the income of poor people in general.

Narrowing the resource flow to a smaller target group does increase its relative significance. For the bottom fourth of Honduran households, adding \$5 million in annual income would represent a 3 percent addition to cash income. Further narrowing the target group would increase the significance of the transfer. For people in the bottom 10th, income transfers from the bonos can add as much as 10 percent to cash income. None of the programs is so finely targeted, though, to reach only those in the most extreme poverty. Moreover, the existing pro-

grams do not reach most poor people. Only about 10 percent of the poorest families benefit from any of the food aid programs.

The Title II program has clearly evolved toward a greater emphasis on poor people. The school feeding program gradually shifted from national coverage for *all* students in *rural schools* to a more narrowly directed effort to help *poor* students in *poor regions*. Thus, though the direct effect has remained small over time, the program's effectiveness in reaching poor people has steadily increased. The 1994 cost-effectiveness study also looked at gender, economic level, and rural/urban residence. No significant difference was detected between boys and girls in the impact of the food assistance. Aid was effectively targeted to the poor in both programs although the targeting is more pronounced in the school bonos program. The coverage of the school feeding program was broader (30 percent of poor households versus 10 percent for the bonos program), but it also included more nonpoor households.

Microlevel Disincentive And Dependency Concerns

Any targeted program has some risk of creating disincentive effects or dependency. If special assistance flows to those classed as the poorest, some families may avoid opportunities that would exclude them from this group. The team undertook no investigation of these issues. It did, however, find anecdotal suggestions of such problems.

In the team's visits to food-for-work projects in southern Honduras, community leaders provided long lists of requests for further food-for-work assistance. There seemed to be a lack of local initiative in maintaining the completed projects and in using local resources to meet related needs. Food for work was seen more as employment generation than a means for building useful local infrastructure. CARE is aware of the problem and has pressed for improvements.

Measuring Impact And Influencing Programs

Overall, the 1994 Honduras studies demonstrate the difficulty of identifying the impact of food aid programs. The amount of resources transferred to each beneficiary family is often relatively small. Many factors influencing impact (such as local traditions, differences due to the relative isolation of the poorest communities, the tendency for other assistance programs to be concentrated in poorer communities) cannot be known or adequately controlled for. As a result, only limited confidence can be placed in empirical results that run counter to expectations. Some important questions cannot be answered with cross-sectional analysis, so time-series studies (in which behavior of treatment and control groups is monitored over a significant period of time) are needed to supplement them.

For an impact evaluation, it is important not to concentrate only on new or unexpected results. Good studies perform an important function when they document concerns that, though known to some, have not been adequately taken into account in program decisions. This is the case with the 1994 studies in at least two respects. First, the studies carefully identified program costs and showed the relation between costs and benefits to the target group for several alternative approaches. Second, the studies looked carefully at recipients to identify exactly who was benefiting.

Two other factors were important in turning the study results into changed practices. First, Honduran policymakers and policy implementers were involved in the studies from their inception. They understood their purpose and were more receptive to accepting study results. Second, the comparative perspective made eliminating ineffective programs easier. A study aimed at a yes-or-no decision on continuing the school snack program would likely have generated hostility if it suggested termination, but

the demonstration that another approach was more effective in achieving desired results reduced opposition to terminating the program.

FOOD AID AND POLITICAL STABILITY

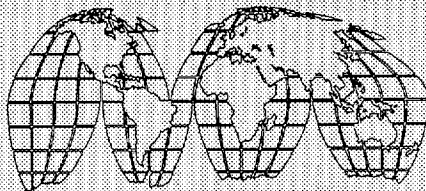
Except during the 1980s, food aid has had little effect on political stability at the national level. Magnitudes involved were too small to have played a significant role, usually adding no more than 2 percent to total cereal supply. From 1982 through 1988, however, the Title I program probably did play a modest role in supporting political stability. Food aid, mostly from the United States, provided between 15 percent and 20 percent of total cereal supply. Because the food entered at the official exchange rate of 2 lempiras per dollar (even though this rate was becoming increasingly overvalued), the effect was to hold down wheat and flour prices. Consumers benefiting from these lower prices lived mostly in urban areas.

Nevertheless, there is nothing special about the food aid component of U.S. foreign assistance during the 1980s. Food aid was typically only 10 percent of total U.S. assistance. It simply provided some incremental resources. Overall U.S. economic aid was critical to maintaining the overvalued exchange rate, which had the effect of subsidizing consumption of imports. This contributed significantly to political stability.

The stability obtained through U.S. assistance was not free. It did buy time, enabling the Hon-

duran government and people to postpone adjusting the exchange rate to a more convenient time. But doing so surely raised the ultimate cost of the adjustment. Had devaluation occurred sooner, exporters would have begun expanding operations sooner. Exports would have been significantly higher in the mid-1990s had adjustment taken place earlier.

There seems little doubt that the United States achieved important foreign policy interests during the 1980s by helping Honduras postpone adjustment. The primary U.S. goal was to isolate Nicaragua.



"There seems little doubt that U.S. interests were served by the political stability that PL 480 helped support during the 1980s."

Minimizing political unrest and instability in Honduras was one means of achieving this. Whether due to this policy or to other factors, the outcome desired by U.S. policy in Central America was achieved by 1990, so U.S. interest in postponing adjustment ended.

In sum, there seems little doubt that U.S. interests were served by the political stability that PL 480 helped support during the 1980s. It

is less clear that the assistance served the long-term interests of Honduras. Nevertheless, it was a course chosen by elected governments.

At the municipal level, to the extent that food aid resources are available without having to go through central government for approval, they contribute to political decentralization and municipal development. This seems to have been the case in the operation of CARE and other nongovernmental organizations (NGOs) in Honduras in their food-for-work programs.

1. Economic policy. Food aid programs can permit governments to postpone needed economic policy adjustments. That delays implementation of policies that lead to sustainable development.

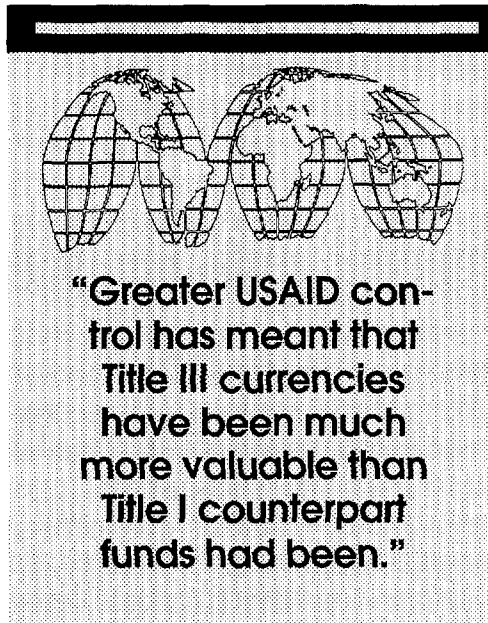
U.S. food aid during the 1980s, along with much larger amounts of Economic Support Fund resources, provided major balance-of-payments assistance. These funds allowed the Honduran government to maintain economic activity and to avoid the sharp declines in income experienced by other countries following the recession and debt crisis of the early 1980s. The time and political space made available by this resource were largely dissipated. The government postponed the economic adjustments needed to restore sustainability to the economy, notably including currency devaluation. Piece-meal policy changes undertaken during this period gave the illusion of action, but their insufficiency only served to increase skepticism about the government's ability to address the economic challenges it faced.

2. Political stability. U.S. food aid can help achieve political stability in the short term by ensuring supplies and reducing food prices. In the Honduran environment, this came at the expense of longer term development success.

Political stability in Honduras was a major U.S. foreign policy goal during the 1980s, as this country sought to isolate the Sandinista gov-

ernment in Nicaragua and to support its neighbors. Food aid reduced tensions and economic difficulties in Honduras during a period of considerable regional conflict. This succeeded in postponing economic adjustment to a later period, when the risks to U.S. foreign policy interests were smaller. The policy thus succeeded in achieving immediate U.S. policy goals, but at the expense of another U.S. foreign policy goal—promoting economic development.

3. Monetization. Local currency generated from the sale of food aid can contribute to sustainable development when these resources are used to support sound, development-oriented policies and programs or are used by qualified NGOs to fund high-priority development activities.



The replacement of Title I by Title III, and by increased monetization of Title II, provides USAID/Honduras with a valuable development tool. Programming of local currency for development programs has contributed significantly to the effectiveness of the Mission program,

both directly and by providing more flexible resources to Honduran government entities. Some activities supported by monetization, such as the agricultural policy unit in the Ministry of Natural Resources, the Land Use and Productivity Enhancement and the Small Farmer Export Development projects, appear to be both important to Honduran development and very effective. The greater USAID control has meant that Title III currencies have been much more valuable than Title I counterpart funds had been.

4. Verification of program impact. Measuring program performance is important to program

success. Where suppositions or hypotheses are not tested against actual outcomes, programs can continue for many years without achieving significant results.

CARE ended its school feeding program using Title II resources in 1995 after more than 35 years. This program had long been justified on the basis of two expected outcomes: increased school attendance by children from poor families and increased learning by students in school. The long duration of the program created dependency. Occasional efforts, such as a 1987 evaluation, sought to document the effects, but unrealistic design and inadequate records led to inconclusive results. A 1994 USAID-financed study did address relevant issues more carefully and concluded that school feeding was less effective than an alternative approach.

5. Nutrition. The effect of food aid on nutrition cannot be isolated from other factors. Nevertheless, the nutritional effectiveness of food aid has surely increased as better approaches and better targeting toward the at-risk population has occurred.

Maternal and child feeding had a significant effect on nutrition. It increased household caloric intake by an average of 280 to 350 kilocalories. Effects of school feeding on caloric intake could not be demonstrated, though this initiative did produce a significant increase in vitamin-A consumption. Similarly, the prevailing view that children are more alert in class and therefore learn better if they have had a school snack could not be demonstrated by test-score data. Studies in Honduras do confirm usual expectations—that increased income, urban residence, and better infrastructure are all associated with better nutrition.

Poor people suffer the greatest malnutrition, and increased income—whether in money, coupons, or food—will reduce it. Conse-

quently, greater targeting of food aid to the poorest is certain to increase the impact on malnutrition. Reducing administrative costs so that a larger share of program costs are actually received by poor people has a similar effect. The Honduran food aid program has used both of these means to increase nutritional effectiveness.

6. Local institutions. Food aid programs can strengthen local governments and local NGOs. These NGOs can make important contributions to grass-roots development, to participatory development processes, and to local empowerment.

Operating through U.S. private voluntary organizations (principally CARE in recent years, with a small amount through the Foundation for Cooperative Housing), U.S. food aid in Honduras has helped strengthen local organizations for primary health care and nutrition services. It has helped support rural infrastructure development and encouraged municipal governments. Both government institutions and NGOs have benefited from these activities. CARE's current efforts to stimulate local-level decision-making and empowerment have generated substantial enthusiasm in the areas where that organization is operating. This initiative is very recent. Results will not be evident for several years, but the approach is promising.

7. Resource integration and food aid inferiority. Food aid need not be an inferior resource if the USAID Mission makes it an integral part of its development program, and where monetization permits sufficient flexibility for good program management.

USAID/Honduras is a model for the Agency in effective program integration. Since 1990, policy dialog, project assistance, and food aid have all played mutually reinforcing roles in promoting sustainable development. This makes evaluation

of food aid as such more difficult, as many of the effects of food aid cannot be separated from the effectiveness of the rest of the portfolio. USAID/Honduras's overall approach appears to be soundly conceived and directed at the key policy and development issues.

Successes such as a 1992 agricultural modernization law, which removed many obstacles to faster agricultural growth and to rural poverty reduction, were helped by effective use of food aid counterpart funds and project assistance for policy dialog.

This close integration would not have been possible during the 1980s, when food aid could not be used for policy leverage, and when local currency funds were mainly used for Honduran government programs. Monetization of Title II resources also increased effectiveness. Overall, the symbiosis among program elements by USAID/Honduras surely increases program effectiveness. At the same time, effectiveness has been hindered by uncertainties about availability of Title III for Honduras, with the Mission

receiving frequent conflicting signals from Washington.

8. Equity. Food aid can be an important vehicle for supporting growth strategies and public resource transfers that differentially benefit lower income groups.

In the mid-1990s food aid to Honduras was shifted toward groups in the most underdeveloped areas and toward use of innovative approaches. This shift offers a promising means for directly addressing poverty both through immediate transfers and through development activities.

The coupon program, which provides income directly to the poorest, also provides income transfers that can add significantly to income for this group. The Land Use and Productivity Enhancement and nontraditional export projects are generating significant additional incomes for poor, nutritionally at-risk populations through increased productivity, employment, and marketed output.

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